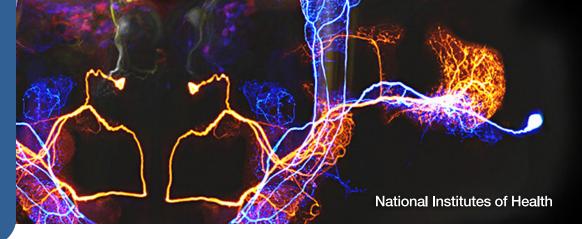
NIH

July 12, 2019 Vol. LXXI, No. 14



118th ACD Tackles Range of **Maior Issues**

BY RICH MCMANUS

Someone ought to do the math sometime on how a 11/2-day gathering of the advisory committee to the NIH director (ACD) manages to include so many topics of lasting significance into so short a space-chromosomes packed into the nucleus have nothing on this group.

The 118th ACD on June 13-14 included updates from the working group on diversity, which for the first time reported real progress in increasing inclusiveness of the scientific workforce. The BRAIN Initiative working group 2.0 proposed what NIH director Dr. Francis Collins called an



NIH director Dr. Francis Collins (c) is flanked by NIH principal deputy director Dr. Lawrence Tabak and Dr. Carrie Wolinetz, director, Office of Science Policy and acting chief of staff.

inspiring set of goals for the next 5 years. And artificial intelligence, already entwined into our lives in everything from banking, to navigation, to Facebook, is poised to make even more significant contributions to biomedical science.

Reaching into the headlines, the committee also dealt with such thorny issues as the need to change the workplace culture around sexual harassment and concerns about foreign influence in biomedical research.

"It has been an intense 6 months since we last met," Collins admitted at the outset.

'Show Me the Data'

The artificial intelligence working group, established last December, urges pursuit of five themes: more AI-ready data

(including cataloging existing sets); more multilingual researchers (those fluent in both biology and computer science); an ELSI (ethical, legal and social implications) component, such as helped guide the Human

SEE ACD, PAGE 6

Car show at inn dazzles youngsters. See p. 12.

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VIRAL NETWORKS, RECONNECTED

Scholars Use Digital Tools to **Explore Medical History**

BY DANA TALESNIK

Some medical historians are looking at their research in a whole new light. Three of these scholars recently described their experiences using new digital platforms to bring a fresh perspective to their historical data.



Dr. Christopher Phillips

The scholars, who spoke at an NLM forum recently in Lister Hill Auditorium, were among 10 researchers featured in the new peer-reviewed, open-access book Viral Networks: Connecting Digital Humanities

Meeting Offers Updates on IRP. Security Policies

BY ERIC BOCK

Members of NIH's leadership outlined a new policy that will place term limits on intramural laboratory and branch chiefs and discussed campus security policies at



Dr. Michael Gottesman

the Assembly of Scientists annual town hall meeting in Masur Auditorium on May 21.

"There's a real issue at NIH in terms of the representation of women and certain minority groups among

our leadership-that is, our laboratory and branch chiefs," said NIH deputy director for

SEE VIRAL NETWORKS, PAGE 8

Graduate, Professional School Fair, July 17

The 12th annual NIH Graduate & Professional School Fair will be held on Wednesday, July 17 from 8:45 a.m. to 2:45 p.m. at Natcher Conference Center. The fair provides an opportunity for NIH summer interns (especially those in college) and postbacs, as well as other college students in the D.C. area, to prepare for the next step in their careers by exploring educational programs leading to the Ph.D., M.D., D.D.S., M.D./Ph.D. and other graduate and professional degrees.

The day will also include workshops on getting to graduate and professional school; M.D./Ph.D. programs; interviewing; and careers in public health, computational biology/bioinformatics, psychology and dentistry. Exhibits will be open from 9:45 a.m. to 1:45 p.m.

A list of institutions planning to attend and registration information can be found at https://www.training.nih.gov/gp_fair.

Changes to Child Care Subsidy Expand Access for NIH Families

The Office of Research Services has announced changes to the Child Care Subsidy Program. Formerly available to NIH federal employees with an adjusted gross income (AGI) of less than \$75,000, the income cap has now been raised to \$80,000. This change increases support for NIH families and maintains our competitive edge with other federal employers.

NIH offers the subsidy program to help NIH families pay for licensed child care. The subsidy can be used for summer camp, before and after care, infant care and more. The program reimburses up to \$5,000 in child care expenses to qualified and registered participants. NIH Title 5 (General Schedule or Wage Grade), Title 42 and Commissioned Corps employees are eligible to participate if their AGI (Line 7 on IRS Form 1040) is \$80,000 or less.

Visit https://www.ors.od.nih.gov/childcaresubsidy to learn about eligibility and enrollment requirements and to apply.

NIDAMED Webinar for HRSA Primary Care Clinicians

NIDA's Michelle Corbin, NIDAMED coordinator, and Quandra Blackeney, Clinical Trials Network Dissemination Initiative coordinator, were featured in a webinar sponsored by the Health Resources and Services Administration's Bureau of Primary Health Care on June 5.

Speakers presented an overview of all the resources available to safety net providers, including a demonstration of the NIDAMED web portal and screening tools for clinicians.

Close to 100 safety net providers, who work at community health centers nationwide, participated in the webinar. NIDAMED coordinates the development and dissemination of science-based resources to health care providers nationwide.



The Affordable Rock 'n Roll Act Band entertains for the second year in a row at the Camp Fantastic barbecue. This year's version boasted 13 members, led by NIH director Dr. Francis Collins, who sings and plays guitar and keyboards.

PHOTOS: LESLIE KOSSOFF

Rocking and Rolling for Camp Fantastic

The Affordable Rock 'n Roll Act Band, led by NIH director Dr. Francis Collins, entertained again this year at the annual Camp Fantastic Barbecue, held near the south entrance of the Clinical Center on June 11.

"This year we grossed over \$7,000 at the barbecue," said David Browne,



Guests at the fundraiser browse one of the many vendor stands erected for the occasion.

co-president of the NIH Recreation & Welfare Association. "We had our largest turnout with over 1,000 in attendance and our largest donation of auction items at more than 30. R&W is appreciative to everyone who came out to raise funds and awareness for such a great cause and we couldn't have asked for better weather."



Collins rocks out at the fundraising concert. His T-shirt reads "Vaccines Cause Adults."

The event benefits Camp Fantastic, a weeklong experience near Front Royal, Va., for pediatric patients at NIH and other local hospitals.



NIH Training Center Is Heading to White Flint

BY DANA TALESNIK

If you've ever considered taking an NIH training course and it seemed remote, you'll now be much closer to taking one. The NIH Training Center is moving to a new spot more accessible to campus.

In July, the Training Center will move its headquarters from Rockledge to 11601 Landsdown St., North Bethesda, adjacent to the White Flint Metro, where they'll share the building with the Nuclear Regulatory Commission and the FDA.

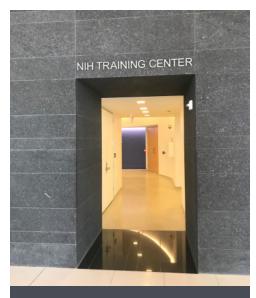
Your NIH badge will expedite your entry into the building through a dedicated NIH employee turnstile. Upon entering, trainees will pass under an archway into the new Training Center on the first floor that features three state-of-the-art classrooms with spacious seating, two breakout rooms, coffee service and a lounge.

The new Training Center is centrally located, within easy walking distance to many dining spots along the Pike, and there are multiple ways to get there from campus. The center is two subway stops from the Medical Center station. There also will be a stop along an NIH shuttle route.



Last year, Training Center staff sat around a conference table making a wish list for their ideal new facility; most of their ideas were incorporated into the build-out. They envisioned a bright, welcoming space with plenty of natural light, new computers and audio-visual equipment and breakout rooms. In fact, the staff custom-designed the space from paint colors and podiums right down to outlet covers.

"The new space has floor-to-ceiling windows, offering lots of natural light, and a soundproof WebEx recording room, which will allow for more online classes," said Barb Leclair, Training Center deputy director. "We're trying to appeal to students by making learning accessible and more engaging."



Views of the new NIH Training Center

To optimize space, all rooms are multi-purpose. They're designed to be convertible for in-person or online classes, personalized training, team meetings or extra work areas.

"We're trying to appeal to students by making learning accessible and more engaging."

~BARB LECLAIR

"Every room is wired for maximum versatility," said Elena Juris, Training Center director. "We're ready for just about every contingency."

As Juris and her team prepared for the move, they used the opportunity to assess training needs and trends.

"It's been a good exercise to think about what training will look like as we become a much more dispersed population," she said. "People are more comfortable with WebEx, smartphones, remote training, [so we're assessing] what's convenient and what's just shiny technology versus what's a lasting trend."

While the Training Center aims to expand online course offerings, Juris said, they continue to evaluate how people learn differently and what they want most.

"We're trying to build more of this technological versatility into the platforms we offer, while not getting rid of our core business, which is the faceto-face training," she said.

The Training Center offers all kinds of courses: from acquisitions to travel, powerful presentations to

project management, professional development to supervisory training and the perpetually popular retirement prep classes.

Said Juris, "There's more variety in what we offer now than ever before."

As the Training Center makes this transition, be sure to check all course confirmation emails for the latest class locations. The Training Center is committed to a smooth move and will help direct you to the new building so you can start building your new skills.

The Training Center will hold an open house at its new location sometime this fall.

For more information about the move, visit hr.nih. gov/training-center/about/nihtc-rockledge-facility-relocation or email NIHTrainingCenter@nih.gov.

To search Training Center course offerings, see https://hr.nih.gov/training-center/course-catalog.

The TC maintains a second site in Natcher Bldg., which will be unaffected by the move.



ON THE COVER: Composite image shows two neurons in the locust brain (one colored orange, one colored blue) that process information about odors.

IMAGE: MARK STOPFER, NICHD

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Town Hall CONTINUED FROM PAGE 1

intramural research Dr. Michael Gottesman.

To create new opportunities for women and minorities, and to bring new ideas and approaches to scientific leadership at NIH, the NIH equity committee worked with the scientific directors and institute and center leadership to develop a draft policy. Once details are worked out, Gottesman said it will require that:

- IC leadership define the [lab or branch chief] position's duties and expectations
- Each IC's board of scientific counselors evaluate the effectiveness of all lab and branch chiefs



- By the current plan, appointments are limited to three full positive review cycles
- The search process for open positions is transparent.

He added it is possible appointments might be extended in cases where the science would suffer because of a leadership change or if there isn't a qualified applicant pool.

"There are ongoing discussions on how to implement this policy," Gottesman said. "The intent is to be fair and even-handed."

Maintaining Workforce Diversity

Recruiting and retaining a diverse workforce is vital to improving the health of our nation, said Dr. Hannah Valantine, NIH's chief officer for scientific workforce diversity.

Many students leave the field of biomedical research during the transition from trainee to tenure-track positions, she said. In

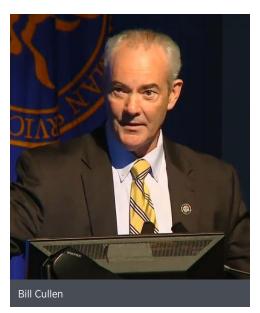


NIH's intramural program, women hold 24 percent of tenured positions and 42 percent of tenure-track positions. African Americans hold 1.2 percent of the tenured positions and 4.7 percent of tenure-track positions.

Valantine's office has developed the NIH Scientific Workforce Diversity Toolkit, which includes information on how to find and recruit qualified candidates from diverse backgrounds, training on implicit bias and information on mentoring.

"We must provide the tools to help people identify candidates and train people," she explained.

Valantine's office is also studying the impact of sexual harassment at NIH. To determine the agency's culture,



NIH conducted the Workplace Climate and Harassment Survey, an in-depth, scientifically rigorous assessment of the NIH workplace. The survey's results were released in an interim report to the advisory committee to the NIH director at its June meeting (see story on p. 1).

"The most important outcome of the survey is that we will be working on new efforts to eliminate these experiences that are so pervasive around us," she said.

To ensure that junior investigators have every opportunity to succeed in a collegial and diverse environment, mentoring and professional development courses must be integral parts of NIH, said Dr. Carl Hashimoto, senior advisor for faculty development.

At NIH, there are three sources of mentoring, with each having complementary strengths, he said. Individual mentors provide specific scientific advice. Mentoring committees provide perspective and feedback on tenure progress. Informal discussion groups provide peer mentoring and social support.

"If we can ensure these sources of mentoring for everyone, then I think we encourage individuals from diverse backgrounds to succeed," he said.

For the first time, Hashimoto helped organize a monthly professional development curriculum for tenure-track investigators and assistant clinical investigators.

"They cover topics that are of interest and relevant to anyone leading an interest group," he explained. Workshop topics include resilience and emotional intelligence, negotiation and conflict management.

Policy on Visitors

Recently, a graduate student from a country declared as a state sponsor of terrorism by the Department of State was on campus to apply for a postdoctoral position. He was interrupted during his scientific presentation and escorted off NIH's campus.

In an NIH-wide email, NIH director Dr. Francis Collins said he was "deeply troubled" by the incident and "extended a personal apology" to the individual.

Every campus visitor, U.S. citizen or non-U.S. citizen, must be screened, said Bill Cullen, NIH chief security officer. He likened the process to going through TSA security



screening at airports.

Since 2011, Cullen said, an HHS policy has required foreign nationals from four countries declared as state sponsors of terrorism to fill out a foreign visitor data request form at least 10 days before their visit.

Once cleared, the person who filled out the form must be escorted while on NIH property. The clearance is good for one year.

Currently, NIH is developing materials to educate staffers on the steps they must take if they are going to invite visitors from the four countries.

The Council of the NIH Assembly of Scientists is an elected committee representing its constituents (tenured and tenure-track investigators, staff clinicians and staff scientists, including intramural and extramural NIH employees) to the NIH leadership.

NIH'ers can watch the entire meeting online at https://videocast.nih.gov/summary.asp?Live=32040&bhcp=1.



Relic Adorns Rear of Bldg. 1

At the back of Bldg. 1, on the B1 level, just below the NIH director's office, appears this relic of a bygone age. "The NIH fire marshal believes it to be an old fire extinguisher cabinet," said Brad Moss, communications director for the Office of Research Services/Office of Research Facilities. The weathered wooden box yawns wide, its door open to the future. It has seen much history pass, but with one of its door brackets hanging loose, it may not be long for this world.

PHOTO: RICH MCMANUS

ORS's Peterson Speaks in Spain on Crisis Response

Steve Peterson, an emergency management specialist in the Office of Research Services, was the keynote speaker for the 16th International Conference on Information Systems for Crisis Response and Management held in Valencia, Spain, from May 19-22. His presentation provided insights on complexities associated with analyzing near real-time social media data during disasters.

The audience consisted mostly of practitioners and academic researchers. He highlighted the work of the National Institute of Environmental Health Sciences' Disaster Research Response Program and the National Library of Medicine's Disaster Information Management Research Center.

Peterson also participated on a panel forum providing insights that could aid in bridging the divide between the practitioner and researcher professions. He discussed the 2016 NIEHS-sponsored special workshop that identified recommendations for review boards related to public health emergencies and disasters.



ORS's Steve Peterson (r) gave the keynote talk and sat on a panel that included (from I) Marcos Borges, Federal University of Rio de Janeiro; Caroline Rizza, Telecom ParisTech; Valerie November, École des Ponts ParisTech; and Jennifer Chan, Northwestern University.

Additionally, Peterson presented his co-authored paper on an operational framework for identifying social media calls for help pertaining to evacuations during disasters. The paper has been requested by a number of researchers within the international community to assist in tackling the growing challenge of identifying and acting on calls for help that are communicated on social media platforms.



On hand at the effective communications workshop were (from I) Danny L. Dickerson, EDI; Dr. Noel Harmon, president and executive director of the Asian Pacific Islander American Scholars; Dr. Penny Burgoon, NCATS; Dr. Gina Wei, NHLBI; Sally Lee, NIGMS; Dr. Adelaida Rosario, NIMHD; Jassé Dickens, EDI.

AAPI Heritage Month Celebrated

Asian Americans and Pacific Islanders (AAPI) within HHS celebrated their heritage in May. The Federal Asian Pacific American Council (FAPAC) invited all HHS employees to join its observance on May 14. The event featured Dr. Howard Koh, former assistant secretary for health. He presented the Dr. Francisco S. Sy Award for excellence in mentorship at HHS to Dr. Peggy Hsieh, a senior investigator at the National Institute of Diabetes and Digestive and Kidney Diseases.

On May 22, Lcdr. Xinzhi Zhang,

president of NIH's FAPAC chapter, delivered the keynote speech at the Centers for Disease Control and Prevention's celebration of AAPI culture.

And on May 23, the NIH chapter held an effective communications workshop at NIH, in collaboration with the Office of Equity, Diversity and Inclusion. Sally Lee, executive officer at the National Institute of General Medical Sciences, provided closing remarks.



NIDDK's Dr. Peggy Hsieh receives the Dr. Francisco S. Sy Award for excellence in mentorship at HHS from Dr. Howard Koh, former assistant secretary for health.



Dr. Dina Katabi of MIT noted that "Al is not a replacement for people."

ACD

CONTINUED FROM PAGE 1

Genome Project; and identification of areas to apply and advance AI.

"There are ways to get it wrong," cautioned Dr. David Glazer, engineering director at Verily and chair of the working group.
"There are side effects we don't want." He noted that some data sets are "almost really valuable" and warned that "machine learning can give an aura of legitimacy to inherent bias, as in 'But the computer says..."

"AI is not a replacement [for people], but an empowerment," added Dr. Dina Katabi, an AI researcher at MIT, who endorses a team approach.

Some Headway in Diversity

Big data was the great ally of Dr. Hannah Valantine, co-chair of the ACD working group on diversity in the biomedical research workforce, who showed graphically that more minorities are applying for and winning NIH funding.

"Has anything changed? Are we seeing any progress? I think so," she told the group. "It's not perfect but some headway is being made."

By a variety of measures, members of groups traditionally underrepresented in research were doing demonstrably better as degree recipients, faculty members and NIH grantees in 2018 than in 2012, which was before NIH introduced a range of interventions to narrow the gap.

Valantine briefly described the new NIH Distinguished Scholars Program, a cohort to be based within the Intramural Research Program that aims to build a self-reinforcing community of principal investigators.

"There's still way, way, way more to do," said Dr. M. Roy Wilson, Valantine's co-chair and president of Wayne State University. "Black males are still stubbornly rare in science."

Impressive at Halfway Mark

The ACD also heard a major report about the future of the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. Dr. John Maunsell of the University of Chicago and his co-chair of the BRAIN Initiative working group 2.0, Dr. Catherine Dulac of Harvard, urged NIH to

"stay on the productive path already underway... continuing support for technology development and targeted study of circuit components."

Their group called for added emphasis on behavior paradigms, an encouragement to balance investigator-initiated research with team science and an emphasis on large-scale transformative projects.

Drs. Jeffrey Kahn of Johns Hopkins University and Jim Eberwine of the University of Pennsylvania, co-chairs of the BRAIN neuroethics subgroup, also presented the results of their deliberations.

"Although brain research entails ethical

issues that are common to other areas of biomedical science, it entails special ethical considerations," they argued. "Because the brain gives rise to consciousness, our innermost thoughts and our most basic human needs, mechanistic studies of the brain have already resulted in new social and ethical questions." Therefore, they called for establishment of a Neuroethics Roadmap for the BRAIN Initiative.

The presentations resonated with members of the ACD, but they want to see further integration of the two reports. After a lengthy discussion of the issue, Collins indicated that a merged report would be developed and shared with the ACD by teleconference within the next month.

Addressing Workplace Harassment

The ACD heard an interim report on NIH's workplace climate assessment survey of harassment, which found that 21.6 percent of the workforce experienced some form of harassment in the past year.

"This is a vexing and unacceptable situation," said Collins, who said NIH will begin addressing the problem immediately, without waiting for the ACD working group on sexual

> harassment to present its final report in December. "We are sorry for the way we did not respond adequately in the past."

"Human behavior, as we all know, is tremendously difficult to change," said Dr. Carrie Wolinetz, director of the Office of Science Policy and acting chief of staff. "This issue gets into uncomfortable space in each of us...It is time for us to be part of the

solution and to apologize to women affected by sexual harassment."

She said a new web-based portal for confidentially reporting episodes of sexual harassment will soon debut, acknowledging that a reluctance to report harassment is "a major issue, due to fears of reprisal, or of not being believed."

"Many men have no idea of what sexual harassment is, even right now," observed new ACD member Dr. Shelley Berger, professor of cell and developmental biology at the University of Pennsylvania.

Collins earned a spontaneous round of applause when he announced his intention not to participate in men-only panels, or "manels," anymore.

"I have sat on too many panels and participated in too many meetings in the past 5 years...that have been populated largely by white males," he said, acknowledging that his decision grew out of recently publicized



Dr. M. Roy Wilson lamented the scant number of black males in biomedical science.

PHOTOS: CHIA-CHI CHARLIE CHANG



artificial intelligence.

concerns about the unsettling prevalence of sexual harassment in science and engineering. "I'm not going to do that anymore...This is something I hope others might notice."

He then reported that the ACD recently welcomed seven new members, all of them women, a likely first in ACD history.

Outbreaks of Ebola, Measles

Updating the group on the outbreak of Ebola in Africa and of measles in the United States, NIAID director Dr. Anthony Fauci underscored troubling developments: In the Democratic Republic of Congo, where more than 1,400 people have died during an uptick in the most recent Ebola crisis, caregivers themselves are under violent attack in some areas.

And in Brooklyn, where there have been more than 560 cases of measles, there are rallies where people are being encouraged not to use proven measles vaccines, despite overwhelming evidence that they are safe and effective.

"This is libertarianism taken to the extreme," said Fauci, who seemed baffled by citizens who are unwilling to accept any civil or medical authority. "Anti-vaxers say [measles] is a trivial disease, but nothing could be further from the truth." Measles is one of the most contagious viruses known to man, Fauci noted. On average about one in 1,000 infected children will die.

"It's a tragedy not to vaccinate children," said Fauci. "We are now going backwards"



Wolinetz talks about sexual harassment in the workplace at the ACD meeting. In foreground are Dr. Spero Manson (I) and Dr. Jose Florez.

since 2000, he said, when measles was eliminated in the U.S. "This is the worst we've seen in 25 years...It is now coming back with a vengeance." Total cases stood at 1,022 in early June.

"This is an outbreak we never should have had," said Collins, noting that he was home-schooled in the pre-vaccination era and missed childhood illnesses. Then he was hospitalized with measles at age 29. "I was a pretty sick cookie."

Foreign Influence on Research Integrity

As the final agenda item, the ACD heard from NIH leadership about a vexing problem facing the agency—inappropriate actions of certain grantees hailing from overseas.

"We have to acknowledge the extraordinary contributions of foreign scientists, over and over again," cautioned Dr. Lawrence Tabak, NIH principal deputy director, "but

there is a small number of people doing some incredibly egregious things. This is calculated theft. This is calculated dishonesty that ends up cheating everybody."

"What we're talking about is a relatively small group of people...who are engaging in some serious acts of misconduct," said Dr. Michael Lauer, NIH deputy director for extramural research.

NIH has reached out to more than 60 institutions, he said, where it has found cases of failure to disclose substantial foreign resources and foreign financial conflicts of interest, on top of serious peer-review violations.

"This is about absence of transparency," said Lauer. "This is about absence of disclosure."

U.S. institutions think they are paying for 12 months of effort from some investigators who are also working simultaneously for foreign entities.

"As one dean told me, essentially what's going on here is time-theft," said Lauer. "We've seen 15-16 months of obligations reported for a single year. We've seen start-up companies and equity in companies that have not been disclosed at all. Patents have been applied for that no one knows anything about."

The result, Lauer said, is duplicative and wasteful NIH spending. "Our funding decisions are distorted as a consequence of that... We've been told some rather blatant lies."

NIH is working closely with the FBI, other federal agencies and scientific societies and associations as part of a broad awareness campaign, said Lauer, who noted that NIH has referred 18 scientists to the HHS Office of the Inspector General for further review, due to an absence of transparency and disclosure.

Universities, too, are involved, with Penn State providing a notably strong example of an effective institutional response, Lauer said.

"The problem is not international work it's not telling [the funding institution] about it," said Lauer. "We reiterate the importance of the contributions of foreign scientists to biomedical research. We must not create a climate that is unwelcoming to them."

To view the ACD webcast and all meeting-related materials, visit https://acd.od.nih.gov/meetings.html.



The advisory committee to the NIH director recently welcomed seven new members—all women. Attending the June ACD meeting were (front, from I) Drs. Rebekah Drezek, Rice University; Roberta Diaz Brinton, University of Arizona; Collins; Anne Churchland, UCSF; Judith Kimble, University of Wisconsin. In the middle row are (from I) Drs. Dina Katabi, MIT; Kristina Johnson, NYU; Brendan Lee, Baylor; Francis Cuss, retired from Bristol-Myers Squibb; Geoffrey Ginsburg, Duke University; Jose Florez, Massachusetts General Hospital; Linda Griffith, MIT; M. Roy Wilson, Wayne State University; Shelley Berger, University of Pennsylvania. At rear are (from I) Drs. Jay Shendure, University of Washington; Wendy Chapman, University of Utah; Spero Manson, University of Colorado; and David Glazer, Verily.



From left: Viral Networks co-editors Katherine Randall and Dr. E. Thomas Ewing, with authors Dr. Sarah Runcie, Dr. Andrew Ruis and Dr. Christopher Phillips, NEH's director of digital humanities Brett Bobley and NLM's history of medicine chief Dr. Jeffrey Reznick, chat with NLM director Dr. Patricia Brennan before the lecture.

Viral Networks

CONTINUED FROM PAGE 1

and Medical History. The forum reunited the trio a year after a 2018 workshop at NIH where they explored how network analysis can provide useful insights into their data. The workshop, forum and book are part of a long-standing digital humanities partnership between NIH and the National Endowment for the Humanities.

The scholars all created databases, charts, graphs and other visualizations that grouped their data into one or more networks. Dr. Christopher Phillips, assistant professor of history at Carnegie Mellon University, created a network of biostatisticians at NIH in the 1940s who pioneered the use of statistics in clinical medicine. As Phillips mapped out what they wrote and where they

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Co-editor Randall helped authors address concerns during the peer-editing process, which she found invaluable as a junior scholar.

published, he found new paths for exploration.

"One of the benefits I discovered from doing this kind of work is that there are statistical tools for measuring how important somebody is within a network," he said.

Digital tools also can help uncover who or what might be missing from the historical record. For another project, Phillips is looking for anyone connected to, but who wasn't publishing about, the 1964 Surgeon General's report that definitively linked smoking to lung cancer. What went unsaid at the time? What previously unnamed sources paved the way to this discovery?

"Data is never neutral. Both how it's produced and analyzed reflects values and systems of power."

~DR. SARAH RUNCIE

*** * ***

"Instead of simply taking chances in the archives following whatever papers happen to be kept, or following whatever reviews happen to be written," said Phillips, "this kind of digital humanistic tool enabled me to zoom back to find out who was missing in my earlier investigations and who was present and to ask new questions about the material."

Dr. Sarah Runcie also used network analysis to create a new narrative based on information missing from the historical record.

Runcie, assistant professor of history, University of Louisiana at Lafayette, encountered a challenge while studying the history of public health in colonial Cameroon. During the mid-20th century, French doctors and Cameroonian medical auxiliaries would travel to rural villages to administer care. But all of the related data Runcie initially found was subjective, told from the perspective of European colonial administrators.

"I grappled with my interests in representing the African labor involved in these mobile teams, given that the numbers or the names of African medical personnel were generally not included in the data I was using to create my visualizations," she said.

She then set out to reframe the data. Runcie found that if she focused not on names but on titles and designations of team leaders, she could alleviate some of the research bias.

"Data is never neutral," she said. "Both how it's produced and analyzed reflects values and systems of power...By running a different analysis of the exact same data, by [removing names of] European doctors, I could begin to uncover African medical labor in my network analysis."

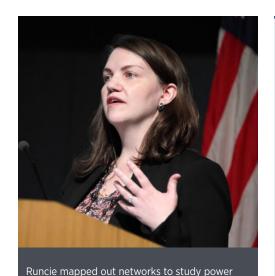
A third scholar featured in the book, Dr. Andrew Ruis, a researcher at the University of Wisconsin, is using networks to study the evolving definitions of nutrition over two centuries. He coded the definitions into physiological, ecological and behavioral categories as the concept of nutrition expanded over time.

"Nutrition is never just about food or even the chemical constituents of food," said Ruis. "There's always been this idea that it's connected to all sorts of other things—health and disease, economics and education, even cultural issues."

Ruis is currently using epistemic network analysis to study school wellness plans. Different districts emphasize different aspects of nutrition, such as healthful and unhealthful foods, obesity or lifelong wellness; his analyses allow



Ruis says he used network analysis to study the evolving definitions of nutrition over two centuries.



and representation in medical history.

PHOTOS: CHIA-CHI CHARLIE CHANG

for exploration of how nutrition is constructed across hundreds of school districts.

Networks encompass ideas, knowledge and communication. "Networks [also] are about people, how they connect to each other and how they change over time and space," said *Viral Networks* co-editor Dr. E. Thomas Ewing, a history professor at Virginia Tech. He considered this idea of social interconnectedness in choosing the book's cover art, a black-and-white photo from the NLM digital archives of nurses at an Illinois training school that operated until 1929.

As the medical historians featured in the book conducted their research, they found both limits and strengths of network analysis. Some scholars expressed concern that the new tech tools didn't yield polished results, said co-editor Katherine Randall, a doctoral candidate at Virginia Tech.

"We embraced that," she said. "We encouraged authors to highlight the process of learning," which she added was invaluable to her as a junior scholar.

Said Randall, "I'm glad to have had the opportunity to be part of this collection that isn't just about presenting polished research findings, but also about the messiness of research, the limitations of methods and the willingness to incorporate interdisciplinary approaches and see where they take you."

The *Viral Networks* book can be downloaded from NLM here: https://collections.nlm.nih.gov/catalog/nlm:n-lmuid-101738722-pdf.

B

Masur Auditorium To Be Renovated

UPDATES IN TWO PHASES

Masur Auditorium in Bldg. 10 has played host to

thousands of scientific lectures, symposia and VIP events. Guests including Stephen Hawking, Jane Goodall, Yo-Yo Ma, Alan Alda, Bill Gates and many Presidents are but a few of the luminaries that have graced the stage over the years.

The Office of Research Services and the Office of Research Facilities are partnering to make Masur more accessible and to update the audio-visual systems and video production capabilities. The auditorium will close in late November for 45-90 days for phase 1 of a two-part renovation. During the closure, the lower stage will be modified and tied into the southwest door threshold. This will allow wheelchair access to the lower stage and podium, without requiring a lift.

The ORS Events Management Branch staff will be providing a more accessible venue to the scientific community and the public. The proposed AV designs and equipment will improve resolution, brightness and flexibility, allowing simplified execution of complex AV and video production support.



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Today's scientific lectures are more complicated, requiring ultrahigh resolution presentation and display equipment while incorporating social media. Gone are the days of toting a carousel of slides and loading them for your lecture. Presentations are full of animations.



videos, music and ultra-high definition images. Attendance was once limited to those who had time to come to the auditorium. Now, scientific lectures are broadcast to the world. Social media access allows for instantaneous questions, feedback and polling, including Facebook live events. Providing two-way communication more than doubles the complexity, equipment and expertise required to sync up all audio, visual and personnel requirements.

Phase 2 addresses issues with the back stage and is expected to take place in late 2020. The current designs will allow wheelchair access to the VIP green (waiting) room and two new restrooms located on the southwest side of the stage.

NIH looks forward to offering scintillating lectures, symposia and rock concerts for years to come. With these upgrades, events staff will be able to offer state-of-the-art technology and access for all guests and employees, regardless of their level of mobility. Stay tuned and don't touch that remote.



Dr. Timothy H. Holtz

OAR Deputy Director Named

NIH's Office of AIDS Research welcomes Dr. Timothy H. Holtz as new deputy director. He is a captain in the Public Health Service and was most recently stationed as CDC country director at the U.S. Embassy in New Delhi, India.

Holtz served as a site principal investigator for the Emory University-Centers for Disease Control and Prevention clinical trial unit site in Thailand and was the site investigator of record of several HIV Prevention Trials Network and Microbicide Trials Network studies. He coordinated the scientific, budgetary and program initiatives for a clinical research site with 55 U.S. and international staff. He was also responsible for advising the Thailand Ministry of Public Health concerning scientific policy decisions and research objectives.

Since 2016, Holtz has served as CDC Division of Global HIV and TB program director (India) for implementing the President's Emergency Plan for AIDS Relief (PEPFAR) strategic objectives and has led the development of country program goals and priorities together with the Office of the Global AIDS Coordinator, India's PEPFAR coordinator and colleagues with USAID. A key component of his most recent position was optimizing organization performance through evaluation and analysis of needs, management of resources and communication of priorities.

In his new post, Holtz will provide scientific leadership including policy development and program management for the diverse, highly complex HIV research program. He will direct development of the scientific components of the NIH Strategic Plan for AIDS and AIDS-Related Research, participate in and convene expert panels, coordinate the development of the \$3 billion NIH HIV research budget and many other duties involving NIH's HIV research agenda.

Fogarty's Bridbord Retires, Collects Accolades

BY ANN PUDERBAUGH

As Fogarty International Center's Dr. Ken Bridbord began his retirement, he was honored this spring for his distinguished leadership by two global health organizations—the HIV Prevention Trials Network and the Consortium of Universities for Global Health

Although Bridbord has retired from federal service, he remains at Fogarty as senior scientist emeritus. Recently, the center's staff and friends assembled to toast Bridbord's many achievements and 35-year tenure at Fogarty.

"We all stand in awe of your contributions," said FIC director Dr. Roger Glass. "It was an amazing joy to work with you and experience your wisdom, your vision and your warmth."

A few years after joining FIC, Bridbord co-chaired the 1987 International Conference on AIDS, held in Washington, D.C. That experience inspired him to develop Fogarty's first institutional extramural funding mechanism—the AIDS International Training and Research Program (AITRP)—designed to help low- and middle-income countries (LMICs) build the necessary scientific capacity to respond to the devastating HIV/AIDS epidemic.

Bridbord's vision that NIH field research could be advanced by investing in developing local scientific leadership on the ground in LMICs resulted in creation of scientific leaders who form the backbone of global HIV/AIDS research today, observed the dean of Yale University's School of Public Health, Dr. Sten Vermund, in a video tribute.

Over the years, Bridbord has influenced countless numbers of research careers and touched virtually every discovery made to advance the prevention and treatment of HIV, observed Dr. Mike Cohen, who was principal investigator on the University of North Carolina's AITRP grant. "Ken never took anything personally, he kept no grudges and he was endlessly kind."

AITRP provided the model for subsequent Fogarty research and training initiatives involving noncommunicable diseases, brain disorders, trauma and injury and other topics, resulting in a portfolio of programs that has supported training for more than 6,000 scientists globally and currently awards about \$60 million each year.

Speakers also paid tribute to Bridbord's dedication, flexibility and patience. "You understood that building sustainable international research and public health capacity required an investment measured in decades, and not in years," observed Dr. Glenda Gray, former Fogarty trainee and grantee, and now president and CEO of the South African Medical Research Council. "You have created a legacy of scientific capacity in the area of HIV/AIDS in Africa, and its impact has, and will continue, to change the world."



Fogarty's Dr. Ken Bridbord and his wife, Georgetown University associate professor Dr. Maryanne Lachat, celebrate his award for distinguished leadership from the Consortium of Universities for Global Health.

For his many contributions in helping reduce death and suffering from HIV/AIDS, Bridbord received the NIH World AIDS Day Award in 2007, and was honored for distinguished service by his alma mater, the University of Chicago.

Earlier in his career, Bridbord played a critical role in convincing the Environmental Protection Agency to remove lead from gasoline, for which he earned the EPA's Silver Medal Award. His current research is focused on investigating possible linkages of lead exposure with cardiovascular and Alzheimer's diseases.

NIH Honored for Top BTWD Participation

NIH enjoyed the spoils of finishing first, for the umpteenth time, in Bike to Work Day (BTWD) participation among large metro-area employers as cyclists enjoyed a complimentary lunch June 25 in Natcher Bldg.

Nicholas Ramfos, representing the Metropolitan Washington Council of Governments, presented the first-place plaque to Dr. Alfred Johnson, NIH deputy director for management.

Some 566 NIH'ers registered for BTWD, held on May 17. "That's the most we've had in the past 5 years," said Joe Cox, chief, Transportation Services Branch, Division of Amenities and Transportation Services, ORS.

"The truth is, we win this award every year, but we like to spread the wealth [in the form of a boxed-lunch reception] around," he noted. "It's a great honor to win this award...It shows we are the leaders [in metro area bike commuting]. We're number one!"



On hand at the 2019 BTWD awards luncheon were (from I) Joe Cox, chief, Transportation Services Branch, ORS; Susan Cook, director, Division of Amenities and Transportation Services, ORS; Colleen McGowan, director, Office of Research Services; Dr. Vernon Anderson, president of the NIH Bicycle Commuter Club; Dr. Alfred Johnson, NIH deputy director for management; Nick Ramfos, director of Commuter Connections, a program of the Metropolitan Washington Council of Governments; and Hannah Anderson-Dana, membership and development coordinator for the Washington Area Bicyclist Association.

PHOTOS: RICH MCMANUS

Cox emphasized that NIH's outstanding performance each year is the result of a partnership with the NIH Bicycle Commuter Club (NIHBCC). Club president Dr. Vernon Anderson of NIGMS underscored the ease, and value, of joining NIHBCC.

"All you need to do is sign up for the listsery on

our website [www.nihbike.com]," said Anderson, who came to NIH 10 years ago and credits the club with helping him "find the way for what is, for me, a significant commute. It's a very valuable way to learn about the facilities and the bicycling community here at NIH."

Ramfos emphasized that bike commuting "is one of the cleanest and healthiest commuter methods you can find. And it's the cheapest, other than walking." More than 18,000 area cyclists participated in BTWD 2019, he said, checking in at some 115 pit stops in the region.

Many of those pit stops were NIHrelated, he noted, including Bldg. 1, the Pike & Rose development, Falls Rd., Twinbrook and Rock Springs.



Johnson congratulates attendees for putting into practice the health messages that NIH preaches.

"NIH really does serve as a leader to other employers in the region," he added. Rounding out the top 5 large-employer BTWD participants were the State Department (247 riders), EPA, the World Bank and USDA (147). "You guys are way ahead of everyone else."

"We like to take our own best advice when it comes to health here at NIH," concluded Johnson, congratulating the attendees.—Rich McManus



Dr. James B. Wyngaarden

Former NIH Director Wyngaarden Mourned

Former NIH director Dr. James B. Wyngaarden died June 14 at age 94 in Durham, N.C., after a long illness. Appointed by President Ronald Reagan, Wyngaarden served as NIH director for more than 7 years, from April 1982 through July 1989.

Among the major challenges that he tackled during his tenure were the nation's biomedical research response to the HIV/ AIDS epidemic and the emergence of recombinant DNA and other ethically charged biotechnologies. Wyngaarden also initiated NIH's leadership role in the international Human Genome Project.

Wyngaarden also was instrumental in setting up the Children's Inn at NIH, which provides lodging and support for families of children receiving treatment at the Clinical Center.

"I am grateful for Dr. Wyngaarden's selfless dedication to NIH's mission of turning scientific discovery into health," said

NIH director Dr. Francis Collins. "Whether researcher, health care provider, or patient, we are all benefiting from his wisdom to this day and will remain forever in his debt."

Before coming to NIH, Wyngaarden was a professor and chair of the department of medicine at Duke University School of Medicine. An internationally recognized authority on the regulation of purine biosynthesis and the genetics of gout, he was also well known for his strong advocacy for the importance of physician-scientists in biomedical research. He also served on numerous NIH committees and a number of Presidential-level panels, including the President's Science Advisory Committee and the U.S. Atomic Energy Commission's advisory committee on biology and medicine.

Wyngaarden is survived by three daughters, a son, 18 grandchildren and 11 great-grandchildren.

VOLUNTEERS

HIV Vaccine Study Needs Subjects

Vaccine Research Center researchers seek persons 18-60 years old who are living with HIV for a research study. The study evaluates an investigational product targeting the HIV virus to determine if it is safe and can generate an immune response. Compensation is provided. For more information, call 1-866-444-1132 (TTY 1-866-411-1010) or email vaccines@nih.gov. Se habla español.

Patients with Liver Disease Needed

NIDDK researchers seek volunteers to participate in a study. For 30 weeks, participants will receive a medication called semaglutide (typically used for type 2 diabetes), aiming to improve their liver disease and help them lose weight. The study hopes to understand liver damage and its treatment in people with non-alcoholic fatty liver disease (NAFLD) or non-alcoholic steatohepatitis (NASH). Compensation is provided. For more information, call 1-866-444-2214 (TTY 1-866-411-1010) or email prpl@cc.nih.gov. Read more at https://go.usa.gov/xmJ8q. Refer to study 19-DK-0072.



NIH director Dr. Francis Collins (I) spends time with pediatric patients staying at the Children's Inn at NIH and their families during the second annual Secret Little Car Show. He is shown with (from I) Abel, 11, and Amana, 8, siblings of Amani, 13, who recently underwent a bone marrow transplant for sickle cell disease at the Clinical Center, and their parents, Lydia and Moses.

Inn Car Show Brings Joy to Children at NIH

The second annual Secret Little Car Show at the Children's Inn at NIH once again united avid car fans and a mix of beautiful and rare vehicles with one goal in mind: to bring joy to seriously ill children and their families who stay at the inn.

The lipstick-red 1935 Cadillac LaSalle convertible was a cheerful eye-catcher, driven to the inn by owners Randy and Susan Denchfield of Chevy Chase.

"The most enjoyment we get from our cars is sharing them with others, especially with children," Randy said. "Showing and putting them in the rumble seat is the real joy. They are amazed at roll-up windows, running boards and suicide doors."

The rare beauty is one of only nine registered in the Cadillac LaSalle National/International Directory.

Lydia and Moses, parents of inn resident Amani, 13, and his siblings, Amana, 8, and Abel, 11, loved the impeccable condition, striking color and design of the Cadillac. But Amani, who recently underwent a bone marrow transplant for sickle cell disease at the Clinical Center, picked a different show favorite.



"The Lamborghini Aventador was his fave," Lydia explains.

Thanks to the generosity of Alessandro Farmeschi, chief executive officer of Lamborghini Americas, Amani didn't just get to admire the two Lamborghinis Farmeschi brought, but also had the chance to sit in the Aventador, feel the steering wheel and push the pedals—experiences that made a deep impression.

"He loved seeing the latest cars and the powerful engines," Lydia noted. "It was an exciting and once-in-alifetime opportunity."

Children and families staying at the inn were also treated to a McLaren 650 S, a historic, black Lincoln Continental, a

shiny, orange 2001 Lamborghini Diablo 6.0, a red Ferrari and others.

Luke Skywalker's Landspeeder X-34, guarded by two live Storm Troopers and two armed Jawas, provided additional highlights. Darth Vader, also known as Eric Jacobs of the Theresa Sondra Jacobs Foundation, brought his Death Star Hummer H1, equipped with a custom-built laser smoke machine as well as Star Wars giveaways and toys for children staying at the inn.

Driven to Cure's customized, brilliant orange Nissan GTR also made an appearance, along with several cars provided by DTC supporters.

Ken Visser, a contractor at NIA's Laboratory of Neurogenetics and a dedicated inn volunteer, organized the event for the second year in a row.



Amani, of Kenya, sits in his favorite car at the show—the Lamborghini Aventador. Two Lamborghinis were brought to the show by Alessandro Farmeschi, CEO of Lamborghini Americas

PHOTOS: KEN VISSER



Posing in front of Driven to Cure's Nissan GTR are Bruce Lee, father of the late Driven to Cure founder and NCI rare kidney cancer patient Andrew Lee, and Collins, who rolled up to the car show on his Harley-Davidson motorcycle.



At left, Amani and his siblings enjoy the Cadillac's rumble seat. At right, Children's Inn resident Jenna, 13, who is being treated at NINDS, enjoyed seeing Driven to Cure's Nissan GTR at the show. She is posing with Driven to Cure's Lee, father of cancer patient Andrew Lee, who benefited from participating in clinical trials before he died in late April at age 23.